

US EPA ARCHIVE DOCUMENT

DCN. FLEP-00060

COMMENTED New Hampshire Dept. Of End. Services

SUBJECT UWRULE

COMMENT We encourage EPA's efforts in the formation of the Universal Waste Rule for batteries, pesticides and fluorescent lamps. We hope that other wastes which have well developed recycling infrastructures, such as paint and antifreeze, will be addressed under the Universal Waste Rule as well.

RESPONSE

In response to the proposed universal waste rule, a number of commenters suggested additional wastes that they believed should be added to the universal waste regulations. Although many of the waste suggested may be appropriate candidates for the universal waste system in the future, the Agency decided to include only three wastes (hazardous waste batteries, thermostats, and certain unused pesticides) in the universal waste rule finalized on May 11, 1995 (60 *FR* 25492). Today's rule adds hazardous waste lamps to the universal waste regulations found in 40 CFR Part 273. States authorized for the universal waste regulations may add additional types of waste, such as spent antifreeze and paint waste, to their individual state universal waste programs through the petition process.

Under 40 CFR Part 273, Subpart G, the public and/or the regulated community can petition EPA and/or individual authorized states to include a certain waste within the universal waste system, such as those listed by the commenter. The petitions must show that the waste meets the evaluation factors in 40 CFR ' 273.81, which the regulatory authority would use to review petitions and make decisions as to whether to add hazardous wastes to the universal waste regulations.

DCN. FLEP-00126

COMMENTED Texas Natural Resource Cons. Comm.

SUBJECT UWRULE

COMMENT Section 273.3(b) of the original Universal Waste Rule defines a "Consolidation Point" as an area used for storing wastes received from generators or other consolidation points, prior to transport to another consolidation point or to a destination facility. Sections 273.20 (b) (2) of the original Universal Waste proposal and 273.30(b) (2) of the current proposal do not make household wastes subject to regulation until they are commingled with regulated wastes. These rule proposals do not address collection centers for recycling household wastes, including lights, at all. This State usually requires such collection centers to notify, so that we can inform the public where they are located. EPA may also want to limit storage time and allow transportation only to registered entities for such

collection centers.

#### RESPONSE

On May 11, 1995, the Agency promulgated the universal waste rule (60 FR 25492). The regulations, found in 40 CFR Part 273, impose a streamlined set of waste management requirements for handlers, including generators and transporters, interim storage facilities, who manage hazardous waste batteries, certain hazardous waste pesticides, and hazardous waste thermostats.

The final rule for hazardous waste lamps does not contain a separate category for consolidation points. EPA is including hazardous waste lamps within the universal waste regulations under 40 Part 273. As part of the universal waste final rule, the persons who would have been included in the generator and consolidation point categories were merged to create two new categories of participant: small quantity handlers of universal waste (SQHUWs) and large quantity handlers of universal waste (LQHUWs). In the hazardous waste lamps final rule, the Agency has decided to remain consistent with the existing universal waste regulations and retain the four categories of participants that were finalized in the universal waste rule (i.e., SQHUWs, LQHUWs, transporters, and destination facilities).

Based upon commenter input and additional information collected and reviewed by the Agency since the publication of the proposed rule, EPA decided to adopt the proposed universal waste approach for controlling potential risks from the management of spent hazardous waste lamps. The Agency is clarifying that all waste lamps exhibiting a hazardous waste characteristic for mercury or any other hazardous constituent fit the definition of hazardous waste lamps. Examples of common hazardous waste lamps include, but are not limited to, fluorescent, high intensity discharge, neon, mercury vapor, high pressure sodium, and metal halide lamps. Spent lamps that do not exhibit any hazardous waste characteristic are not subject to Subtitle C regulation or universal waste management regulations. Today's final rule adds hazardous waste lamps to the universal waste regulations under 40 CFR Part 273. The universal waste rule provides a reduced, or streamlined set of requirements (i.e., universal waste rule is less stringent than Subtitle C management standards). The universal waste regulations include proper storage standards, accumulation time limits, and notification requirements for facilities that handle but do not treat or dispose universal waste.

Handlers that accumulate more than 5,000 kilograms of total universal wastes at any one time are designated as a large quantity handler of universal waste and are subject to the notification requirements of 40 CFR 273.32. The notification requirement ensures that regulatory agencies are aware of the large quantity handlers of universal waste. The notification requirement is a one-time notification and is applicable on a site-specific basis. Large quantity handlers must notify the EPA Regional Administrator of their universal waste management activities and obtain an EPA identification number only if they do not already have one. Small quantity handlers are not required to notify EPA of their universal waste management activities and need not obtain an EPA identification number. Generators of universal waste lamps that have never generated more than

100 kg of hazardous waste in a calendar month, but now accumulate more than 5,000 kg of universal waste must notify the Agency of their universal hazardous waste management activities. Under the universal waste system, conditionally-exempt quantity generators can choose to manage their universal waste lamps in accordance with either the CESQG regulations under 40 CFR 261.5 or as universal waste under Part 273 (40 CFR 273.8(a)(2)). Authorized states can be more stringent than the universal waste regulations if they so choose.

DCN. FLEP-00156

COMMENTED National Electrical Manufacturers Assn.

SUBJECT UWRULE

COMMENT EPA is undoubtedly aware that NEMA supports the inclusion of

mercury-containing thermostats in the Universal Waste rule.

Inclusion of thermostats in the Universal Waste system is entirely appropriate because the thermostat housing will protect the internal mercury switch from breakage. In addition, thermostats are not generated in quantities remotely approaching the 500-600 million spent lamps generated each year. Relaxation of the Subtitle C requirements will encourage the collection and recycling of these thermostats in a manner that is protective.

The fragility and quantity of spent lamps differentiates them from thermostats and makes them inappropriate for the Universal Waste approach.

#### RESPONSE

On May 11, 1995, the Agency promulgated the universal waste rule (60 FR 25492). The regulations, found in 40 CFR Part 273, impose a streamlined set of waste management requirements for generators, transporters, and interim storage facilities who manage hazardous waste batteries, certain hazardous waste pesticides, and hazardous waste thermostats. The universal waste regulations include proper storage standards, accumulation time limits, and notification requirements for facilities that generate and handle but do not treat or dispose universal waste.

Based upon commenter input and additional information collected and reviewed by the Agency since the publication of the proposed rule, EPA decided to adopt the universal waste approach for controlling potential risks from the management of spent hazardous waste lamps. Today's final rule adds hazardous waste lamps to the universal waste regulations under 40 CFR Part 273. The universal waste rule provides a reduced, or streamlined set of requirements (i.e., universal waste rule is less stringent than full Subtitle C management standards). Studies conducted by the Agency indicate that the greatest potential for mercury emissions from spent lamps occurs during storage and transport. Uncontrolled crushing and breaking of lamps allows mercury to be emitted into the air.

The commenter suggests that spent lamps are too fragile and generated in too high a quantity to

qualify for treatment as a universal waste. However, hazardous waste lamps meet the criteria in 40 CFR 273.81 to determine if a hazardous waste would fit into a universal waste management regulatory program and if the streamlined standards of the universal waste program would improve the overall management of the waste. These criteria include a) the waste must be a hazardous waste generated by a wide variety of generators; b) the waste, or category of waste, should not be exclusive to a particular industry but must be generated by a wide variety of establishments; c) the waste should be generated frequently, but in relatively small quantities; d) systems to be used for collecting the waste should ensure close stewardship of the waste; e) the risks posed by the waste during accumulation and transport should be relatively low compared to the risks posed by other hazardous waste and specific management standards would be protective of human health and the environment during accumulation and transport; f) regulation of the waste under the universal waste rule should result in the diversion of the waste from management with non-hazardous waste streams; g) regulation of the waste as a universal waste should improve implementation of and compliance with the hazardous waste regulatory program.

DCN. FLEP-00204

COMMENTED American Lamp Recycling, Ltd.

SUBJECT UWRULE

COMMENT Second, the Agency has created an entity under option 2 called a "consolidation point". The owner of a consolidation point is authorized to store hazardous waste lamps for up to one year. We request that the Agency clarify if a "destination facility" also qualifies as a consolidation point if it receives hazardous waste lamps from generators and stores them at its site for less than one year prior to recycling. Is consolidation storage an activity which is different from "prior storage"?

RESPONSE

The final rule for hazardous waste lamps does not contain a separate category for consolidation points. EPA is including hazardous waste lamps within the universal waste regulations under 40 Part 273. As part of the universal waste final rule, the persons who would have been included in the generator and consolidation point categories were merged to create two new categories of participant: small quantity handlers of universal waste (SQHUWs) and large quantity handlers of universal waste (LQHUWs). In the hazardous waste lamps final rule, the Agency has decided to remain consistent with the existing universal waste regulations and retain the four categories of participants that were finalized in the universal waste rule (i.e., SQHUWs, LQHUWs, transporters, and destination facilities).

These regulations also define a "destination facility." A destination facility is a facility that treats, disposes of, or recycles universal waste. Destination facilities that also consolidate universal waste remain subject to full Subtitle C regulation. Facilities that only accumulate universal waste and do not treat, dispose or recycle universal waste are not destination facilities.

DCN. FLEP-00218

COMMENTED Louisiana Dept. of Environmental Quality

SUBJECT UWRULE

COMMENT 2. EPA should adopt a rule consistent with other trends and efforts in emissions reductions. Lamp recycling can result in significant airborne mercury reductions only if it represents a component of a broader effort addressing many other small sources of mercury emissions. We endorse a universal waste approach not only for lamps and batteries, but for other sources of mercury in the municipal waste stream, wastes which do not normally fail the toxicity characteristic, e.g. thermostats and thermometers.

RESPONSE

Based upon commenter input and additional information collected and reviewed by the Agency since the publication of the proposed rule, EPA decided to adopt the universal waste approach for controlling potential risks from the management of spent hazardous waste lamps. The Agency is clarifying that all waste lamps exhibiting a hazardous waste characteristic for mercury or any other hazardous constituent fit the definition of hazardous waste lamps. Examples of common hazardous waste lamps include, but are not limited to, fluorescent, high intensity discharge, neon, mercury vapor, high pressure sodium, and metal halide lamps. Spent lamps that do not exhibit any hazardous waste characteristic are not subject to Subtitle C regulation or universal waste management regulations. Today's final rule adds hazardous waste lamps to the universal waste regulations under 40 CFR Part 273. The universal waste rule provides a reduced, or streamlined set of requirements (i.e., universal waste rule is less stringent than full Subtitle C management standards) for certain waste streams, including thermostats. Studies conducted by the Agency indicate that the greatest potential for mercury emissions from spent lamps occurs during storage and transport, due to breakage.

Under Part 273, Subpart G, the public and/or the regulated community can petition EPA and/or individual authorized states to include a certain waste within the universal waste system, such as those listed by the commenter. The petitions must show that the waste meets the evaluation factors in ' 273.81, which the regulatory authority would use to review petitions and make decisions as to whether to add hazardous wastes to the universal waste regulations.

DCN. FLEP-00230

COMMENTED BellSouth Corporation

SUBJECT UWRULE

COMMENT 3. Although comment was not requested in the July 27 proposal on other possible waste candidates to include in the Universal Waste Rule, we would like to suggest the regulation of all mercury-containing devices in like manner. With only a few exceptions, BellSouth does not generate regulated hazardous

wastes. When they are generated, however, they are in such a small quantity, per facility, that the company would fall in the category of a CESQG. If all mercury-containing devices were incorporated into the universal waste requirements along with mercury-containing lamps, industry could develop greater management flexibility in the handling of these wastes in order to keep them out of the municipal waste stream. We feel that the Florida rule FAC 62-737 (as yet proposed) "Management of Spent Mercury-containing Lamps and Devices," is a good model for the management of these wastes. It defines mercury-containing devices as "...any electrical product or other device excluding batteries and lamps, that is determined by the Department as proven to release mercury into the environment and includes thermostats, electrical mercury switches, thermometers and manometers."

#### RESPONSE

Based upon commenter input and additional information collected and reviewed by the Agency since the publication of the proposed rule, EPA decided to adopt the universal waste approach for controlling potential risks from the management of spent hazardous waste lamps. The Agency is clarifying that all waste lamps exhibiting a hazardous waste characteristic for mercury or any other hazardous constituent fit the definition of hazardous waste lamps. Examples of common hazardous waste lamps include, but are not limited to, fluorescent, high intensity discharge, neon, mercury vapor, high pressure sodium, and metal halide lamps. Spent lamps that do not exhibit any hazardous waste characteristic are not subject to Subtitle C regulation or universal waste management regulations. Today's final rule adds hazardous waste lamps to the universal waste regulations under 40 CFR Part 273. The universal waste rule provides a reduced, or streamlined set of requirements (i.e., universal waste rule is less stringent than full Subtitle C management standards) for certain waste streams, including thermostats.

In addition, today's final rule does not affect the regulatory status of conditionally exempt small quantity generators (CESQGs), (i.e., those generators that produce less than 100 kg of hazardous waste per month). CESQGs continue to be conditionally exempt from full Subtitle C regulation provided that the provisions under ' 261.5 are met. These generators may elect to manage hazardous waste lamps under today's rule. In addition, they may be subject to applicable state regulations, which may be more stringent than the federal regulations governing CESQs.

The Agency notes that many States have already adopted or are considering adopting universal waste standards for spent lamps. Since this rule is not promulgated pursuant to HSWA, it is applicable on the effective date only in States that do not have final RCRA authorization. Authorized states that wish to adopt this rule will have to seek authorization for the adoption of spent lamps to their universal waste programs. States are not required to adopt less stringent regulations, and therefore, need not adopt the universal waste regulations for spent lamps.

However, EPA strongly encourages them to do so, not only to achieve the most benefits of the universal waste program but also to reduce the complexity of interstate transportation of these universal wastes.

Under 40 CFR Part 273, Subpart G, the public and/or the regulated community can petition EPA and/or individual authorized states to include a certain waste within the universal waste system, such as those listed by the commenter. The petitions must show that the waste meets the evaluation factors in 40 CFR ' 273.81, which the regulatory authority would use to review petitions and make decisions as to whether to add hazardous wastes to the universal waste regulations.

DCN. FLEP-00282

COMMENTED Michigan Dept. of Natural Resources

SUBJECT UWRULE

COMMENT Other Mercury-Containing Wastes and Re-evaluation. We also support adding used light switches, thermostats and thermometers containing mercury under a regulation requiring recycling. These wastes are known to contain approximately 3,500 mg, 3,000 mg and 600 mg of mercury, respectively and are generated by a wide variety of users. Recycling technologies are available for these wastes and mercury free alternatives are also available. As mentioned previously, pollution prevention is the primary choice for reducing environmental mercury contamination.

RESPONSE

Based upon commenter input and additional information collected and reviewed by the Agency since the publication of the proposed rule, EPA decided to adopt the universal waste approach for controlling potential risks from the management of spent hazardous waste lamps. Today's final rule adds hazardous waste lamps to the universal waste regulations under 40 CFR Part 273. The universal waste rule provides a reduced, or streamlined set of requirements (i.e., universal waste rule is less stringent than full Subtitle C management standards) for certain waste streams, including thermostats. Studies conducted by the Agency indicate that the greatest potential for mercury emissions from spent lamps occurs during storage and transport, due to breakage.

Under Part 273, Subpart G, the public and/or the regulated community can petition EPA and/or individual authorized states to include a certain waste within the universal waste system, such as those listed by the commenter. The petitions must show that the waste meets the evaluation factors in ' 273.81, which the regulatory authority would use to review petitions and make decisions as to whether to add hazardous wastes to the universal waste regulations.

DCN. FLEP-00297

COMMENTED Florida Dept. of Environ. Protection

SUBJECT UWRULE

COMMENT SCOPE As mentioned during the Department's comments on EPA's proposed Universal Waste Rule, we believe that EPA should also include mercury-containing devices (MCDs) such as thermometers, thermostats and electric switches under this rule's special waste collection system. As the EPA's own studies have shown, these MCDs are right behind mercury-containing lamps as the most significant sources of mercury getting into MSW (especially now that the major battery manufacturers have eliminated mercury from household alkaline and zinc-carbon batteries and stopped manufacturing or marketing mercuric oxide batteries in the United States). Certain manufacturers of these MCDs, in particular thermostats, are ready to kick off a national reverse distribution program once the enabling regulatory structure is in place. Due to the mercury contamination problems being experienced by many states, the EPA should make the maximum effort in addressing all of the most significant mercury-containing wastes of concern in the current proposed rule.

RESPONSE

Based upon commenter input and additional information collected and reviewed by the Agency since the publication of the proposed rule, EPA decided to adopt the universal waste approach for controlling potential risks from the management of spent hazardous waste lamps. Today's final rule adds hazardous waste lamps to the universal waste regulations under 40 CFR Part 273. The universal waste rule provides a reduced, or streamlined set of requirements (i.e., universal waste rule is less stringent than full Subtitle C management standards) for certain waste streams, including thermostats. Studies conducted by the Agency indicate that the greatest potential for mercury emissions from spent lamps occurs during storage and transport, due to breakage.

Under 40 CFR Part 273, Subpart G, the public and/or the regulated community can petition EPA and/or individual authorized states to include a certain waste within the universal waste system, such as those listed by the commenter. The petitions must show that the waste meets the evaluation factors in 40 CFR' 273.81, which the regulatory authority would use to review petitions and make decisions as to whether to add hazardous wastes to the universal waste regulations.

DCN. FLEP-00309

COMMENTED Bethlehem Apparatus Company

SUBJECT UWRULE

COMMENT C. ADDITIONAL MERCURY-CONTAINING RECYCLABLE ITEMS SHOULD BE

INCLUDED IN THE UNIVERSAL WASTE PROPOSAL Bethlehem believes that the vast majority of the items processed in its report should also be eligible for inclusion in the Universal Waste Proposal.

Specifically, Bethlehem processes all types of mercury thermometers, manometers, sphygmomanometers, electrical relays and switches from natural gas regulators and telephone junction boxes, dental amalgam and thermostats. All of these materials should satisfy the three pronged test for inclusion in the Universal Waste Rule. 1. Are they frequently generated by atypical hazardous waste generating industries? These materials are generated by homeowners, small businesses, municipalities, utility companies, hospitals and medical and dental practices. While there are other hazardous wastes generated by certain of these entities, these are not the chemical or manufacturing entities which are the typical hazardous waste generators regulated by RCRA. 2. Are they generated by a vast community, the size of which poses regulatory implementation difficulties? As the diversity of the generators listed above indicates, it is a wide community which is equal to, if not greater than the size of the community which generates the Lamps. Accordingly, it is a vast community which would be difficult to regulate. 3. Are they present in significant volumes in the municipal waste stream? Although Bethlehem cannot estimate the volume of these materials disposed of in the municipal waste stream the size of the community which generates this waste stream is such that these items are present in every municipal waste stream. Thus, Bethlehem recommends the inclusion of these materials in the Universal Waste Proposal. These materials could be regulated pursuant to the same Option 2, with the modifications suggested above.

#### RESPONSE

On May 11, 1995, the Agency promulgated the universal waste rule (60 FR 25492). The regulations, found in 40 CFR Part 273, impose a streamlined set of waste management requirements for generators, transporters, and interim storage facilities who manage hazardous waste batteries, certain hazardous waste pesticides, and hazardous waste thermostats. The universal waste regulations include proper storage standards, accumulation time limits, and notification requirements for facilities that generate and handle but do not treat or dispose universal waste.

Based upon commenter input and additional information collected and reviewed by the Agency since the publication of the proposed rule, EPA decided to adopt the universal waste approach for controlling potential risks from the management of spent hazardous waste lamps.

Today's final rule adds hazardous waste lamps to the universal waste regulations under 40 CFR

Part 273. Studies conducted by the Agency indicate that the greatest potential for mercury emissions from spent lamps occurs during storage and transport, due to breakage.

Under 40 CFR Part 273, Subpart G, the public and/or the regulated community can petition EPA and/or individual authorized states to include a certain waste within the universal waste system, such as those listed by the commenter. The petitions must show that the waste meets the evaluation factors in 40 CFR ' 273.81, which the regulatory authority would use to review petitions and make decisions as to whether to add hazardous wastes to the universal waste regulations.

DCN. FLEP-00107

COMMENTED North Carolina Dept. of End. Health

SUBJECT UWRULE

COMMENT The "generator" is currently interpreted as being the entity which used/owned the lamp though it is not addressed in the proposed regulation. Contractors relamping a facility could be considered a co-generator but never the sole generator. The contractor may complete any necessary documentation and transport the waste lamps to a consolidation point, but liability would still remain with the owner/operator to properly manage the lamps to meet all generator requirements. The generator requirements in 40 CFR 273.31 should address this issue by clarifying the definition of a lamp generator. The regulations should also clarify that the weight of the lamps are not counted toward a facility's hazardous waste generator status as long as the lamps are managed under the universal waste system. Otherwise the facility's lamp management would be fully subject to hazardous waste regulations.

RESPONSE

The term universal waste handler is defined under existing 40 CFR 273.6 as a generator of universal waste or the owner or operator of a facility (including all contiguous property) that receives universal waste from other universal waste handlers, accumulates universal waste, and sends universal waste to another universal waste handler, to a destination facility, or to a foreign destination. There are two types of entities that are considered handlers of universal waste lamps. The first is a person who generates the lamps, i.e. the person who used the lamps, then determined that they are no longer usable and thus should be discarded. Contractors who remove universal waste lamps from service are considered handlers and co-generators of the waste. The second type of handler is a person who receives universal waste lamps from generators or other handlers, consolidates the lamps, and then sends the lamps on to other universal waste handlers, recyclers, or treatment and disposal facilities. Facilities that accumulate universal waste lamps but do not treat, recycle or dispose of them are handlers of the lamps. Each separate location, (e.g., generating location or collecting location) is considered a separate handler.

Facilities that manage their hazardous waste lamps as universal waste under 40 CFR Part 273 do not have to include lamps in the facility's determination of hazardous waste generator status (40 CFR 261.5 (c) (6)). If the generator manages such lamps under the universal waste system and does not generate any other hazardous waste, that generator is not subject to other Subtitle C hazardous waste management regulations, such as the regulations in Part 262. Under the universal waste system, conditionally-exempt quantity generators, those generators that produce less than 100 kg of hazardous waste per month, can choose to manage their universal waste lamps in accordance with either the CESQG regulations under 40 CFR 261.5 or as universal waste under Part 273 (40 CFR 273.8 (a)(2)).